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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

| EXAMINER |
|---|
| THERIAULT, STEVEN B |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2179 | |

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | **Application No.** | **Applicant(s)** |
| **Office Action Summary** | 10/090,643 | VILLET ET AL. |
| | **Examiner** | **Art Unit** | |
| | Steven B. Theriault | 2179 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>07 April 2005</u>.

2a)☐ This action is **FINAL**.          2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
     closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-21</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some *  c)☐ None of:

     1.☐ Certified copies of the priority documents have been received.

     2.☐ Certified copies of the priority documents have been received in Application No. _____.

     3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)                    4)☐ Interview Summary (PTO-413)
                                                                Paper No(s)/Mail Date. _____.
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   5)☐ Notice of Informal Patent Application (PTO-152)
     Paper No(s)/Mail Date _____.                          6)☐ Other: _____.

## DETAILED ACTION

1.      This action is responsive to the following communications: Amendment filed on 04/07/2005.

2.      Claims 1-21 are pending in the case. Claims 1 and 21 are the independent claims.

Applicant's attention is directed to the fact that a new examiner has been assigned to this case.

The Examiner's name and telephone number are provided below.

### Drawings

3.      The drawings were received on 04/07/2005.  These drawings are acceptable.

### Claim Rejections - 35 USC § 102

4.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

a.      A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

5.      **Claims 1-6, 7, 13-15 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by**

**Gupta et al (hereinafter Gupta) U.S. Patent No. 6,738,081, issued May 18, 2004 and filed**

**Dec. 22, 2000.**

In regard to **Independent claim 1,** Gupta teaches *a method for pointing at information in a multi-*

*dimensional space, comprising the steps of:*

- *Setting a portion of a full screen as a pointing screen;* (Gupta Figures 2-6 and column1, lines 60-67) Gupta expressly teaches the user may define a selected region (mask) over the selected region of the display, where the mask determines at least a part of the profile of the selected region.

- *Determining whether desired information to be pointed at is included in the set pointing screen;* (Gupta Figures 2-6 and column 2, lines 5-25) Gupta teaches the user determines through the use of an input device where the mask rests on the image.

- *When it is determined that the desired information is not included in the pointing screen, moving the pointing screen so that the desired information is included in the pointing screen; and (d) Pointing at the desired information included in the pointing screen when it is determined that the desired information is included in the pointing screen or after step (c), wherein at least one of steps (a), (c), and (d) is performed by a user's s motion in at least one direction selected from up, down, forward, backward, to the left, and to the right* (Gupta column 3, lines 30-47and Figure 4 and 5) Gupta teaches the ability to adjust both the horizontal and vertical limits of the masks as well as a drag and drop function of moving the masks up, down, left, right and any combination thereof.

With respect to **dependant claim 2**, Gupta teaches *the full screen includes a plurality of pieces of information.* (Gupta Figure 2-6) Gupta shows a plurality of pieces of information in which the display is made up of a plurality of selectable sections that each contains more detailed information.

With respect to **dependant claim 3**, *Gupta* teaches the following sub-steps:

- *Determining whether the desired information is located on the left or right of the pointing screen, when it is determined that the desired information is not included in the pointing screen; (Gupta column3, lines 8-10)* Gupta teaches the user manipulates

the masks based on the desired selection area size and where the user manipulates the mask by using an input device.

- *Moving the pointing screen to the left so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the left of the pointing screen, and proceeding to step (d); and (c13) moving the pointing screen to the right so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the right of the pointing screen, and proceeding to step (d)* (Gupta column 3, lines 30-37) Gupta teaches the left and right vertical masks can be manipulated to fine tune the position of the mask and increase the size to the left or the right or both.

With respect to **dependant claim 4**, Gupta teaches the following:

- *Determining whether the desired information is located above or below the pointing screen, when it is determined that the desired information is not included in the pointing screen; (Gupta column3, lines 8-10)* Gupta teaches the user manipulates the masks based on the desired selection area size and where the user manipulates the mask by using an input device.
- *Moving the pointing screen up so that the desired information is included in the pointing screen, when it is determined that the desired information is located above the pointing screen, and proceeding to step (d); and moving the pointing screen down so that the desired information is included in the pointing screen, when it is determined that the desired information is located below the pointing screen, and proceeding to step (d)* (Gupta column 3, lines 30-37) Gupta teaches the left and right vertical masks can be manipulated to fine tune the position of the mask and increase the size to the left or the right or both.

With respect to **dependant claim 5**, Wambach teaches the following:

- *Determining whether the desired information is located on the left or right of the pointing screen, when it is determined that the desired information is not included in the pointing screen; (c32) moving the pointing screen to the left so that the pointing screen is located at a same horizontal position as the desired information, when it is determined that the desired information is located on the left of the pointing screen;*
  (c33) *Moving the pointing screen to the right so that the pointing screen is located at a same horizontal position as the desired information, when it is determined that the desired information is located on the right of the pointing screen; determining whether the desired information is included in the pointing screen moved in step (c32) or (c33) and proceeding to step (d) when it is determined that the desired information is included in the moved pointing screen; (Gupta column3, lines 8-10)* Gupta teaches the user manipulates the masks based on the desired selection area size and where the user manipulates the mask by using an input device. Gupta also teaches the left and right vertical masks can be manipulated to fine tune the position of the mask and increase the size to the left or the right or both. Gupta shows the ability to move the display area in any direction on the screen (Gupta column 3, lines 30-37 and Figures 2-6).

- *Determining whether the desired information is located above or below the moved pointing screen, when it is determined that the desired information is not included in the moved pointing screen; moving the pointing screen up so that the desired information is included in the pointing screen, when it is determined that the desired information is located above the moved pointing screen, and proceeding to step (d); and moving the pointing screen down so that the desired information is included in the pointing screen, when it is determined that the desired information is located below the moved pointing screen, and proceeding to step (d) (Gupta column3, lines 8-10)* Gupta teaches the user manipulates the masks based on the desired selection

area size and where the user manipulates the mask by using an input device. Gupta also teaches the left and right vertical masks can be manipulated to fine tune the position of the mask and increase the size to the left or the right or both. Gupta shows the ability to move the display area in any direction on the screen (Gupta column 3, lines 30-37 and Figures 2-6).

With respect to dependant claim 6, *Wambach teaches the following sub-steps:*

- *Determining whether the desired information is located above or below the pointing screen, when it is determined that the desired information is not included in the pointing screen; moving the pointing screen up so that the pointing screen is located at a same vertical position as the desired information, when it is determined that the desired information is located above the pointing screen; moving the pointing screen down so that the pointing screen is located at a same vertical position as the desired information, when it is determined that the desired information is located below the pointing screen; determining whether the desired information is included in the pointing screen moved in step (c42) or (c43) and proceeding to step (d) when it is determined that the desired information is included in the moved pointing screen;* (Gupta column3, lines 8-10) Gupta teaches the user manipulates the masks based on the desired selection area size and where the user manipulates the mask by using an input device. Gupta also teaches the left and right vertical masks can be manipulated to fine tune the position of the mask and increase the size to the left or the right or both. Gupta shows the ability to move the display area in any direction on the screen (Gupta column 3, lines 30-37 and Figures 2-6).

- *Determining whether the desired information is located on the left or right of the moved pointing screen, when it is determined that the desired information is not included in the moved pointing screen; moving the pointing screen to the left so that the desired information is included in the pointing screen, when it is determined that*

*the desired information is located on the left of the moved pointing screen, and*

*proceeding to step (d); and moving the pointing screen to the right so that the desired*

*information is included in the pointing screen, when it is determined that the desired*

*information is located on the right of the moved pointing screen, and proceeding to*

*step (d) (Gupta column3, lines 8-10)* Gupta teaches the user manipulates the masks

based on the desired selection area size and where the user manipulates the mask

by using an input device. Gupta also teaches the left and right vertical masks can be

manipulated to fine tune the position of the mask and increase the size to the left or

the right or both. Gupta shows the ability to move the display area in any direction on

the screen (Gupta column 3, lines 30-37 and Figures 2-6).

With respect to **dependant claim 7**, Gupta teaches *the user's motion is sensed by a sensor

Gupta Figure 2 and column 2, lines 62-65)* Gupta teaches the use of an touch sensitive display

that will sense the users input or movement.

With respect to **dependant claim 9**, Gutpa teaches *At least one of a horizontal size and a vertical

size of the pointing screen is set* (Gupta Figures 2-6 and column 3, line 39-47) Gupta expressly

shows the horizontal and vertical sizing of the mask overlays on the screen.

With respect to **dependant claim 10**, Gupta teaches a*n initial position which is initially pointed at

within the pointing screen is set* (Gupta column 3, lines 12-15) Gupta teaches the touch of the

screen at the initial point to start sizing the selection mask.

With respect to **dependant claim 13,** Gupta t*eaches the full screen corresponds to a graphical-

user interface screen* (Gupta figure 2-6). Gupta teaches a desktop computer system with a

display screen is used for manipulating objects.

With respect to **dependant claim 14**, Gupta teaches *the sensor performs a unique pointing function like a mouse* (Gupta Figure 2 and column 3, lines 10-16). Gupta teaches the user drags the pointer by touching the screen and can perform the drag and drop functions like a mouse.

With respect to **dependant claim 15**, Gupta teaches *the desired information pointed at is executed* (Gupta Figure 6 and column 3, lines 50-67). Gupta teaches the selection of the image within a mask region and where a text file appears to display more information about the selected region.

With respect to **dependant claim 16**, Gupta teaches the sensor is included in an information input device (Gupta column 3, lines 9-20) Gupta teaches a touch screen for manipulating the cursor where the touch sensor is built into the device.

In regard to **Independent claim 21**, Gupta teaches *the method for pointing at information in a multi-dimensional space and performing functions of a mouse, the method comprising: an information selection step of creating a pointing screen at a portion of a full screen at a user's option such that the pointing screen includes at least one piece of information to be executed; and an information execution step of executing the information included in the pointing screen by clicking the information* (Gupta figure 2 and column 3, lines 55-67). Gupta teaches a method for pointing at multi-dimensional data where the user inputs information through a touch screen and performs drag and drop operations while also sizing the mask overlays either horizontally or vertically (Gupta column 3, lines 9-27). Gupta also teaches where a mouse can be used with the device (see figure 7 and column 4, lines 1-9). Gupta further shows where the user selects the

information inside the mask and a text file is opened describing the information shown in the

window (see Figure 6).

**References to specific columns, figures or lines should not be limiting in any way. The**

**entire reference provides disclosure related to the claimed invention.**

### *Claim Rejections - 35 USC § 103*

6.    **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness**

**rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as
set forth in section 102 of this title, if the differences between the subject matter sought to be
patented and the prior art are such that the subject matter as a whole would have been obvious
at the time the invention was made to a person having ordinary skill in the art to which said
subject matter pertains. Patentability shall not be negatived by the manner in which the invention
was made.

**Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al**

**(hereinafter Gupta) U.S. Patent No. 6,738,081, issued May 18, 2004 and filed Dec. 22, 2000**

**in view of Wambach et al (hereinafter Wambach) U.S. Patent No. 6,097,369, issued Aug. 1,**

**2000 and filed Feb. 2, 1995.**

With respect to **dependant claim 8**, as indicated in the above discussion, Gupta teaches

every element of claim 1.

Gupta expressly discloses a mask overlay (pointing screen) where the user can move or

resize the selection area in any direction and the system employs either a touch sensitive screen

or mouse to aid the user in inputting information (Gupta column 3, lines 8-16 and figures 2-6).

Gupta fails to expressly disclose *the pointing screen is moved by moving the sensor*

*beyond at least one of a horizontal motion range and a vertical motion range, when it is*

*determined that the desired information is not included in the pointing screen in step (c), said at*

*least one of the horizontal motion range and the vertical motion range corresponding to at least*

*one range in which the sensor can be moved to the left/right and upward/downward, respectively, to point at the desired information in step (d)*

Wambach expressly discloses a wearable input device that operates as a mouse to input information into a computer with the user operating the mouse functions by operating buttons incorporated on the glove at the ends of the users fingers. Wambach teaches the horizontal and vertical movement of the sensors within the glove will cause a corresponding movement of the cursor on the display device (Wambach IA, IB and 2A, 28 and column 2, lines 62-67 and column 3, lines 1-15). Gupta and Wambach are analogous art because they are from the same field of endeavor of manipulating a cursor and performing the drag and drop functions of a mouse.

Accordingly, It would have been obvious to one of ordinary skill in the art, having the teachings of Gupta and Wambach before him at the time of the invention was made, to modify the system of Gupta to incorporate a wearable sensor that is moved beyond a horizontal or vertical range to force a corresponding movement in the cursor as taught by Wambach, in order to obtain a system that is able to adjust with the movement of the sensor the horizontal and vertical sizes of the display areas. One would have been motivated to make such a combination because of the need to minimize or eliminate the unnecessary hand movement off of the keyboard to operate a conventional mouse as taught by Wambach.

7.      **Claims 11-12, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al (hereinafter Gupta) U.S. Patent No. 6,738,081, issued May 18, 2004 and filed Dec. 22, 2000, in view of IBM et al (hereinafter IBM) "IBM Technical disclosure bulletin, January 1994".**

With respect to **dependant claims 11 and 19**, as indicated in the above discussion, Gupta teaches every element of claim 1.

Gupta expressly discloses an interface where the user may define a selected region (mask) over the selected region of the display and where the information and the mask may then be selected or pointed at by the user (Gupta Figures 2-6 and column1, lines 60-67) Gupta fails to expressly disclose/teach a *speed at which the pointing screen is moved is set.*

IBM teaches a menu system where the speed of the cursor movement can be set. It is in the examiners interpretation that in order for the window to be moved it must first be selected. Which would create a cursor selection of the window and in setting the cursor speed the corresponding speed of the window movement can be set. IBM and Gupta are analogous art because they are from the same field of endeavor of providing user interface controls for selecting user options.

Accordingly, It would have been obvious to one of ordinary skill in the art, having the teachings of Gupta and IBM before him at the time of the invention was made, to modify the system of Gupta to incorporate a menu for setting the cursor speed, in order to obtain a system that is able to adjust speed at which a selected window can move across the screen. One would have been motivated to make such a combination because of the need to be able to customize the desktop to different and multiple users needs at different times as taught by IBM.

With respect to **dependant claims 12 and 20**, as indicated in the above discussion, Gupta teaches every element of claim 1.

Gupta fails to expressly teach a *degree of reaction to the user's motion of a pointer displayed in the pointing screen, is set.*

IBM expressly teaches the ability to adjust through menu settings the system settings for mouse controls, cursor movement, click speed and other settings that allow for customization of the desktop to a given user or group (IBM page 1, lines 20-30). IBM and Gupta are analogous art because they are from the same field of endeavor of providing user interface controls for selecting user options.

Accordingly, It would have been obvious to one of ordinary skill in the art, having the teachings of Gupta and IBM before him at the time of the invention was made, to modify the system of Gupta to incorporate a menu for setting the degree of reaction of the cursor, in order to obtain a system that is able to allow a user to set the sensitivity to movement and how far the cursor will move with a corresponding movement of the users input on the screen or through the mouse. One would have been motivated to make such a combination because of the need to be able to customize the desktop to different and multiple users needs at different times as taught by IBM.

With respect to **dependant claim 17**, as indicated in the above discussion, Gupta teaches every element of claim 9.

Gupta expressly discloses the ability to adjust the horizontal and vertical size of the selection area through the use of a mouse or direct input on a touch screen.

*Gupta fails to expressly disclose the preparing a size menu used for setting said at least one of the horizontal size and the vertical size.*

IBM expressly teaches a menu system to be used in a graphical interface for setting the window sizes on the display, which would include the horizontal and vertical size of a display window. It is in the examiners interpretation, that for usability purposes most graphical systems incorporate multiple methods for adjusting settings on the desktop. For example, menus, shortcuts, Icons, hotkeys, mouse functions etc are typically deployed to provide a second and sometimes third method for the user to access a given function, for the purpose of shortening the process of executing the task.

Accordingly, It would have been obvious to one of ordinary skill in the art, having the teachings of Gupta and IBM before him at the time of the invention was made, to modify the system of Gupta to incorporate a menu for setting the horizontal and vertical window sizes, in order to obtain a system that is able to allow a user to set the window size through a menu. One would have been motivated to make such a combination because of the need to be able to customize the desktop to different and multiple users needs at different times as taught by IBM.

With respect to **dependant claim 18**, as indicated in the above discussion, Gupta teaches every element of claim 10.

Gupta expressly discloses the ability to adjust or set the initial position of the selection window (column 3, lines 10-15).

Gupta fails to expressly teach a *preparing a size menu used for setting the initial position*.

IBM expressly teaches a system for customizing desktop properties through a series of menus, which includes mouse and cursor controls where the desktop appearance and location of objects can be controlled (IBM, page 1, lines 20 – 40).

Accordingly, It would have been obvious to one of ordinary skill in the art, having the teachings of Gupta and IBM before him at the time of the invention was made, to modify the system of Gupta to incorporate a menu for setting for the initial cursor position within the selection window, in order to obtain a system that is able to allow a user to set starting point of the cursor. One would have been motivated to make such a combination because of the need to be able to customize the desktop to different and multiple users needs at different times as taught by IBM.

**References to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention.**

## *Response to Arguments*

9.   Applicant's arguments, see page 3, Para 4, lines 1-3, filed 04/07/2005, with respect to the rejection(s)of claim(s) 1 - 21 under 35 USC 102(e) have been fully considered and are persuasive.  Therefore, the rejection has been withdrawn.  However, upon further consideration, a new ground(s) of rejection is made in view of Gupta et al.

With respect to the argument to claim 8, Wambach fails to expressly disclose a process of setting a selection window size. See applicants argument page 5, Para 3, lines 3-5. However, Gupta in view of Wambach expressly teaches the process of a user setting the horizontal and vertical size of the selection window through the use of a wearable glove.

With respect to the argument to claims 11-12, 17-20, Wambach fails to expressly disclose a method for using a menu to prepare the size of the selection window, reaction speed of the window movement and cursor speed. See applicants argument pages 6-7. However, Gupta in view IBM expressly teaches a method for setting window sizes, cursor speeds, and reaction effects to cursors through the use of a menu.

### Conclusion

10.    The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Number 5,182,728 to Shen et al. issued Jan. 26, 1993, filed June 28, 1991, and discloses an ultrasound imaging system that allows a user to select a section of the display window for further processing.

U.S. Patent Number 5,617,114 to Bier et al. issued Apr. 1, 1997, filed May. 24, 1995, and discloses a user interface having tools and overlays that allow a user to select a specific region of the display.
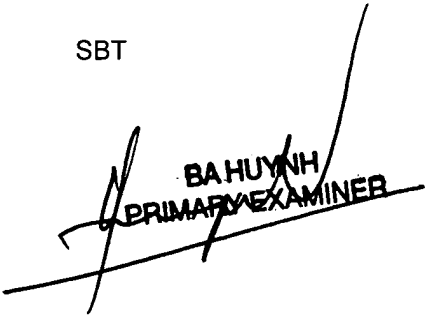
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M-F 7:00 - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather Herndon can be reached on (571) 272-4136. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SBT

BA HUYNH
PRIMARY EXAMINER